

IN THE SPECIFICATION:

Please amend the paragraph beginning on page 7, line 20, and ending on page 8, line 25, as follows:

An information disk recording/reproducing device according to claim 1 of the present invention, in which recording or reproduction can be performed on an information disk having an information recording track formed like a spiral or a concentric circle, comprises: a disk rotating unit for rotating the information disk; a rotational position information output unit for outputting rotational position information for the information disk of the disk rotating unit in each area provided by dividing one rotation into m (m is a natural number equal to or larger than 2); a reading unit for reading an information signal from the information disk; a radius direction driving unit for driving the reading unit in the radius direction of the information disk; a track cross detecting unit for detecting a track cross caused by crossing and generating a track cross signal based on a reproduction signal when the reading unit is traversed on the information recording track by the driving of the radius direction driving unit; a track cross direction detecting unit for detecting the direction of the track cross caused by the crossing based on the reproduction signal when the reading unit is traversed on the information recording track by the driving of the radius direction driving unit; a counting unit for counting the pulses of a track cross signal from the track cross detecting unit, with a code indicating a track cross direction from the track cross direction detecting unit, based on the output from the

rotational position information output unit in each of the areas divided into m ; and a control unit which rotates the disk rotating unit at a first speed, obtains a first counted value of the counting unit while making the radius direction driving unit non-operational ~~nonoperational~~, rotates the disk rotating unit at one or more kinds of rotational speeds of second, third,...rotational speeds higher than the first rotational speed, obtains second, third, ... counted values of the counting unit while making the radius direction driving unit non-operational ~~nonoperational~~, and compares a difference between the first counted value and the second, third, ... counted values with a threshold value so as to determine the maximum rotational speed of the information disk, the threshold value being predetermined while using, as a vibration detection value, a value proportionate to the sum of absolute values of counted values obtained in the areas divided into m .

Please amend the paragraph beginning on page 8, line 33, and ending on page 10, line 8, as follows:

An information disk recording/reproducing device according to claim 2 of the present invention, in which recording or reproduction can be performed on an information disk having an information recording track formed like a spiral or a concentric circle, comprises: a disk rotating unit for rotating the information disk; a rotational position information output unit for outputting rotational position information for the information disk of the disk rotating unit

in each area provided by dividing one rotation into n (n is a natural number equal to or larger than 2) ; a rotational position information dividing unit which further divides into k (k is a natural number equal to or larger than 1) the area having been provided by dividing one rotation into n for the rotational position information from the rotational position information output unit and outputs the rotational position information in each of $m = n \cdot k$ areas; a reading unit for reading an information signal from the information disk; a radius direction driving unit for driving the reading unit in the radius direction of the information disk; a track cross detecting unit for detecting a track cross caused by crossing and generating a track cross signal based on a reproduction signal when the reading unit is traversed on the information recording track by the driving of the radius direction driving unit; a track cross direction detecting unit for detecting the direction of the track cross caused by the crossing on the reproduction signal when the reading unit is traversed on the information recording track by the driving of the radius direction driving unit; a counting unit for counting the pulses of a track cross signal from the track cross detecting unit, with a code indicating a track cross direction from, the track cross direction detecting unit, based on the output from the rotational position information dividing unit in each of the areas divided into m ; and a control unit which rotates the disk rotating unit at a first speed, obtains a first counted value of the counting unit while making the radius direction driving unit non-operational ~~nonoperational~~, rotates the disk rotating unit at one or more kinds of rotating speeds of second, third, ... rotational speeds higher than the first

rotational speed, obtains second, third, ... counted values of the counting unit while making the radius direction driving unit non-operational ~~nonoperational~~, and compares a difference between the first counted value and the second, third, .. counted values with a predetermined threshold value so as to determine the maximum rotational speed of the information disk while fusing, as a vibration detection value, a value proportionate to the sum of absolute values of counted values obtained in the areas divided into m.

Please amend the paragraph beginning on page 13, line 5, and ending on page 14, line 12, as follows:

Further, a method for controlling a recording/reproducing speed of an information disk recording/reproducing device according to claim 6 of the present invention, in which recording or reproduction can be performed on an information disk having an information recording track formed like a spiral or a 10 concentric circle, the device comprising a disk rotating unit for rotating the information disk, a reading unit for reading an information signal from the information disk, and a radius direction driving unit for driving the reading unit in the radius direction of the information disk. This method comprises the steps of: rotating the information disk; outputting rotational position information for the information disk in each area provided by dividing one rotation into m (m is a natural number equal to or larger than 2); reading an information signal from the information disk; driving the reading unit in the radius direction

of the information disk; detecting a track cross caused by crossing and generating a track cross signal based on a reproduction signal when the reading unit is traversed on the information recording track by the driving of the radius direction driving unit; detecting the direction of the trace cross caused by the crossing based on the reproduction signal when the reading unit is traversed on the information recording track. by the driving of the radius direction driving unit; counting the pulses of a track cross signal, with a code indicating the track cross direction, to obtain a first counted value in each of the areas provided by dividing one rotation of the rotational position information into m while rotating the disk rotating unit at a first speed and making the radius direction driving unit non-operational ~~nonoperational~~; counting the pulses of the track cross signal, with the code... counted values in each of the areas provided by dividing one rotation of the rotational position information into m while rotating the disk rotating unit at one or more kinds of second, third, rotational speeds higher than the first rotational speed and making the radius direction driving unit non-operational ~~nonoperational~~; and comparing a difference between the first counted value and the second, third, counted values with a predetermined threshold value so as to determine the maximum rotational speed of the information disk while using, as a vibration detection value, a value proportionate to the sum of absolute values of counted values obtained in the areas divided into m .

Please amend the paragraph beginning on page 14, line 21, and ending on page 15, line

30, as follows:

A method for controlling a recording/reproducing speed of an information disk recording/ reproducing device according to claim 7 of the present invention, in which recording or reproduction can be performed on an information disk having an information recording track formed like a spiral or a concentric circle, the device comprising a disk rotating unit for rotating the information disk, a reading unit for reading an information signal from the information disk, and a radius direction driving unit for driving the reading unit in the radius direction of the information disk. This method comprises the steps of: rotating the information disk; outputting rotational position information for the information disk in each of $m = n \cdot k$ areas provided by further dividing into k (k is a natural number equal to or larger than 1) an area having been provided by dividing one rotation into m (m is a natural number equal to or larger than 2); reading an information signal from the information disk; driving the reading unit in the radius direction of the information disk; detecting a track cross caused by crossing and generating a track cross signal based on a reproduction signal when the reading unit is traversed on the information recording track by the driving of the radius direction driving unit; detecting the direction of the track cross caused by the crossing based on the reproduction signal when the reading unit is traversed on the information recording track by the driving of the radius direction driving unit; counting the pulses of a track cross signal, with a code indicating the track cross direction, to obtain a first counted value in each of the areas provided by dividing

one rotation of the rotational position information into m while rotating the disk rotating unit at a first speed and making the radius direction driving unit non-operational ~~nonoperational~~; counting the pulses of the track cross signal, with the code indicating the track cross direction, to obtain second, third, ... counted values in each of the areas provided by dividing one rotation of the rotational position information into m while rotating the disk rotating unit at one or more kinds of second, third, ... rotational speeds higher than the first rotational speed and making the radius direction driving unit non-operational ~~nonoperational~~; and comparing a difference between the first counted value and the second, third, ... counted values with a predetermined threshold value so as to determine the maximum rotational speed of the information disk while using, as a vibration detection value, a value proportionate to the sum of absolute values of counted values obtained in the areas divided into m.

Please amend the paragraph beginning on page 24, line 21, and ending on page 25, line 6, as follows:

Then, the radius direction driving unit 109 is made non-operational ~~nonoperational~~. Track crossing is caused by an eccentric component between the tracks of the information disk 102 and the reading unit 104. Thus, for each area provided by dividing one rotation into m (m is a natural number equal to or larger than 2), the counted value of the counting unit 115 is obtained with the code indicating a track cross direction based on the output of the rotational

position information output unit 114.

Please amend the paragraph beginning on page 26, line 9, and ending on page 26, line 19, as follows:

The control unit 116 controls the disk rotating unit 103 to make a rotation at 4000 rpm. Similarly, the radius direction driving unit 109 is made non-operational ~~nonoperational~~. Then, track crossing is caused by an eccentric component + a vibration component between the tracks of the information disk 102 and the reading unit 104. Thus, the counted value of the counting unit 115 is obtained with the code indicating a track cross direction based on the output of the rotational position information output unit 114 for each of the areas obtained by dividing one rotation into six. The obtained counted value is expressed by the equation below.

Please amend the paragraph beginning on page 33, line 1, and ending on page 33, line 8, as follows:

Then, the radius direction driving unit 109 is made non-operational ~~nonoperational~~. Since track crossing is caused by an eccentric component between the tracks of the information disk 102 and the reading unit 104. Thus, for each area obtained by dividing 5 one rotation into $6 \times 2 = 12$, the counted value of the counting unit 115 is obtained with the code indicating a track cross direction based on the output of the rotational position information dividing unit

2J1.

Please amend the paragraph beginning on page 33, line 28, and ending on page 34, line 6, as follows:

The control unit 116 controls the disk rotating unit 103 to make a rotation at 4000 rpm. Similarly, the radius direction driving unit 109 is made non-operational ~~nonoperational~~. When, track crossing is caused by an eccentric component + a vibration component between the tracks of the information disk 202 and the reading unit 104. Thus, the counted value of the counting unit 115 is obtained with the code indicating a track cross direction based on the output of the rotational position information output unit 114 for each of the areas obtained by dividing one rotation into six. The obtained counted value is expressed by the equation below. --